

Māori Health Review

Making Education Easy

Issue 19 – 2009

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Tēnā koutou, tēnā koutou, tēnā tātou katoa

Nau mai ki tenei Tirohanga hou Hauora Māori. He rangahau tuhi hou e paa ana ki nga hau ora a ki te oratanga o te Māori.

No reira noho ora mai raa i o koutou waahi noho a waahi mahi hoki.

Noho ora mai

Matire

Greetings

Welcome to this issue of the Māori Health Review. Each issue attempts to bring you research relevant to the health and wellbeing of Māori.

I welcome feedback and suggestions for papers/research to include in future issues and I'm pleased to hear and read about the excellent work being undertaken in Hauora Māori.

This month has been busy for Māori health research (and me!) with the Māori Respiratory Health hui and HRC's Hui Whakapiripiri. I hope to bring you papers from both of these exciting events in the next issues! Until then, take care.

Matire

Dr Matire Harwood

matire@maorihealthreview.co.nz

Racial/ethnic disparities in the identification of children with autism spectrum disorders

Authors: Mandell DS et al

Summary: This US-based study sought to determine the association between race/ethnicity and documented autism spectrum disorders (ASDs) in a cohort of 2568 children aged 8 years who were identified as meeting surveillance criteria for ASD through abstraction of evaluation records from multiple sources. Fifty-eight percent of children had a documented autism spectrum disorder. Analyses adjusted for gender, IQ, birthweight, and maternal education revealed that children who were Black (OR, 0.79), Hispanic (OR, 0.76), or of other race/ethnicity (OR, 0.65) were less likely than were White children to have a documented ASD. This disparity persisted for Black children, regardless of IQ, and was concentrated for children of other ethnicities when IQ was <70.

Comment: I couldn't find data on NZ rates of ASD by ethnicity but thought this paper raised an interesting issue. As the authors state, there are ethnic differences in the way clinicians report ASD; they are more likely to make a diagnosis of intellectual delay than ASD for Black and Hispanic children. This suggests that these children may be missing out on appropriate care. Dr Jill Bevan-Brown's research at Massey identified unique issues for Māori whānau caring for someone with ASD. As a result, a DVD was produced for whānau and support agencies. 'In my shoes' was released in January 2009 and can be ordered through the following websites:

www.inmyshoes.co.nz

www.autismnz.org.nz

Reference: *Am J Public Health.* 2009;99(3):493-8.

<http://www.ajph.org/cgi/content/abstract/99/3/493>

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2009

Improving participation in breast screening in a rural general practice with a predominately Māori population

Authors: Thomson RM et al

Summary: This paper describes the strategies that were implemented to increase participation in breast screening in 2005 and 2007 in a rural general practice with a high Māori population, following the identification of issues that had adversely affected participation in 2003. The strategies were designed to increase local involvement and reduce barriers to participation, through facilitating the provision of information about and promotion of breast screening, improving the identification of eligible women, and improving the registration and appointment making processes. In 2003, less than 45% of eligible women (aged 50–64 years) underwent breast screening. Following the introduction of the strategies, breast screening coverage was 97.9% in 2005 and 97.6% in 2007. The authors note that the strategies used did not require new services or resources; they required only local input, flexibility and collaboration between existing services.

Comment: A great paper that provides practical advice on ways to improve breast screening rates. Importantly, PMP/PPP targets for breast screening in women of high needs including Māori have been set. Meeting these targets has implications for Māori providers in terms of improved quality of care, improved health outcomes and, of course, funding.

Reference: *N Z Med J.* 2009;122(1291):39-47.
<http://www.nzma.org.nz/journal/abstract.php?id=3510>

Juggling work and breastfeeding: effects of maternity leave and occupational characteristics

Authors: Guendelman S et al

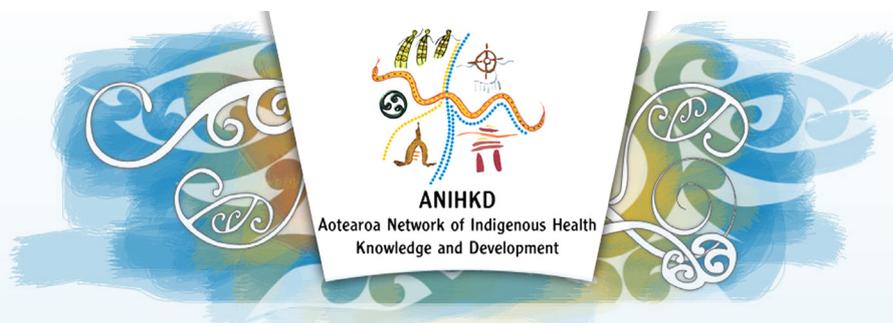
Summary: These researchers examined the relationship between breastfeeding and maternity leave before and after delivery among 770 full-time working mothers in Southern California. Taking maternity leave of ≤ 6 weeks or 6 to 12 weeks was associated, respectively, with a four-fold and two-fold higher odds of failure to establish breastfeeding and an increased probability of cessation after successful establishment compared with women not returning to work. Women who were particularly likely to cease breastfeeding upon returning to work included those with inflexible jobs, those in non-managerial positions, and women with high psychosocial distress. Time off work in the ninth month of pregnancy was not linked to breastfeeding establishment or duration.

Comment: The final message is an important one – we must advocate for our breastfeeding mums as ultimately this facilitates better health and health outcomes for our tamariki. Two mechanisms are paid maternity leave and a supportive workplace that allows the working mum to continue to breastfeed. Māori mums working in non-management positions or in jobs that aren't flexible (the majority!) will not have the latter. We must campaign at all levels – politically, publicly, and at worksites including our own and at home.

Reference: *Pediatrics.* 2009;123(1):e38-46.

<http://pediatrics.aappublications.org/cgi/content/abstract/123/1/e38>

*Independent commentary by Dr Matire Harwood,
Medical Research Institute of New Zealand*



The 2nd National Hui of the Aotearoa Network of Indigenous Health Knowledge and Development (ANIHKD)

20–22 April 2009, Te Ara o Tawhaki Whare Matoro Marae, EIT, Taradale, Napier

This hui will build on the theme of the 2007 meeting, “*Whānau Knowledge in Action*” and continue the kaupapa of the ANIHKD and INIHKD, namely to facilitate engagement and collaboration of key stakeholders in the area of indigenous health knowledge and development.

Key note speakers will identify how putting “*Whānau Knowledge in Action*” is supported by research, policy and tikanga.

Speakers will also present examples of how this model is being put into action.

Participants will have the opportunity to share their knowledge and experiences both formally and informally.

This hui is important in the continuing development of the ANIHKD Trust by ensuring ongoing engagement with and mandate from a wide range of stakeholders.

There will also be an opportunity at the hui to plan for the 4th Biennial Meeting of the INIHKD being hosted by USA in 2010.

For further information and to register see the website www.anihkd.org
Or contact Paul Robertson Chair on (paul.robertson@otago.ac.nz)

Maire's comments for the next 3 papers:

As you may know, Māori have raised a number of issues about the study Te Wai o Rona for Māori. And so I have been hesitant to include papers from the study in Maori Health Review. However, I have been convinced to do so after talking with Māori stakeholders including researchers, clinicians, participants and community, who are unaware that results have been written up and published in both national and international medical journals. I have included 3 papers here that I believe have important implications for diabetes care in Māori communities:

1. undiagnosed diabetes is an issue for Māori, and particularly men, those who are overweight and those who have a CSC. Steps must be taken to improve diagnosis rates and access to quality diabetes care for Māori.
2. point-of-care testing with finger pricks tests (like the ones we see at community events, in mobile vans or even in GP clinics) are not adequate and may in fact falsely reassure a person that they don't have diabetes. We must ensure that Māori receive quality screening tests such as fasting glucose or oral glucose tests.
3. the piloting of a personal trainer (Māori community health worker) approach was effective for weight loss in all participants of the programme. The methods for developing and testing the programme are well described and may be useful to those groups considering a similar approach within their own community.

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1. Prevalence of undiagnosed diabetes, impaired glucose tolerance, and impaired fasting glucose among Māori in Te Wai o Rona: Diabetes Prevention Strategy

Authors: Simmons D et al

Summary: Baseline population-based data from Te Wai o Rona: Diabetes Prevention Strategy are presented regarding the proportions of Māori aged ≥ 28 years with undiagnosed diabetes, impaired glucose tolerance (IGT) and impaired fasting glucose (IFG) (dysglycaemia), resident within the Waikato/Lakes areas of New Zealand. Of the 3817 eligible Māori, mean BMI among women was 32.9 kg/m² and 33.1 kg/m² among men. The age standardised prevalence of undiagnosed diabetes was higher among men than women (6.5% vs 4.2%), as was that for IFG (5.4% vs 3.0%), but not IGT (8.5% vs 9.7%) with no rural-urban differences. Prevalence of dysglycaemia increased with increasing BMI with no clear inflection point and was 1.38-fold greater among those with a community services card after adjusting for age and gender and 1.33-fold greater after additionally adjusting for BMI.

Reference: *N Z Med J.* 2009;122(1288):30-8.

<http://www.nzma.org.nz/journal/abstract.php?id=3432>

2. Point-of-care testing as a tool for screening for diabetes and pre-diabetes

Authors: Rush E et al

Summary: The utility of finger-prick point-of-care testing (POCT) of blood glucose was investigated for the detection of dysglycaemia in data from a fasting POCT and an oral glucose tolerance test (OGTT) with laboratory assays conducted with 3225 participants enrolled in the Te Wai o Rona Diabetes Prevention Strategy. Participants had no self-reported diabetes. New diabetes was found in 161 participants (5.0%) and pre-diabetes in 414 [impaired glucose tolerance 299 (9.3%), impaired fasting glucose 115 (3.6%)]. The mean difference in capillary and venous measures was 0.02 mmol/L. Capillary POCT predicted dysglycaemia and impaired glucose tolerance and new diabetes (area under curve 0.76 and 0.71) more poorly than venous laboratory analysis (area under curve 0.87 and 0.81, respectively). Optimal screening criteria were best at a venous glucose of 5.4 mmol/L; 77% sensitivity/specificity.

Reference: *Diabet Med.* 2008;25(9):1070-5

<http://www3.interscience.wiley.com/journal/120118957/abstract>

3. Development and piloting of a community health worker-based intervention for the prevention of diabetes among New Zealand Māori in Te Wai o Rona: Diabetes Prevention Strategy

Authors: Simmons D et al

Summary: Outcomes are reported from the piloting of a personal trainer approach using a Māori Community Health Worker (MCHW) to help facilitate intensive lifestyle change among 5240 non-pregnant Māori family members without diabetes from 106 rural and 106 urban geographical clusters. In a pilot study (Vanguard Study), 160 participants were weighed before and during MCHW intervention (consisting of healthy lifestyle messages, toolkit and delivery) and compared with 52 participants weighed immediately before intervention and with 1143 participants from the same geographical area. The participants and MCHW considered that the intervention was acceptable. Significant weight loss occurred during the Vanguard Study among all participants (-1.3 kg; p<0.001), and after screening and during the study among the 27 participants diagnosed with impaired glucose tolerance/impaired fasting glucose (5.2 kg; p<0.01).

Reference: *Public Health Nutr.* 2008;11:1318-25.

<http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=2639304>

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Disclaimer: This publication is not intended as a replacement for regular medical education but to assist in the process. The reviews are a summarised interpretation of the published study and reflect the opinion of the writer rather than those of the research group or scientific journal. It is suggested readers review the full trial data before forming a final conclusion on its merits.

Trends in head injury incidence in New Zealand: a hospital-based study from 1997/1998 to 2003/2004

Authors: Barker-Collo SL et al

Summary: Data from a national health database were analysed to determine the incidence of traumatic brain injury (TBI)-related hospital discharges (including 1-day stays) to New Zealand Hospitals from 1997/1998 to 2003/2004. Crude annual hospital-based incidence rates for the total population ranged from 226.9 per 100,000 in 1998/1999 to 349.2 in 2002/2003. Incidence rates increased markedly with the change from ICD-9 to ICD-10 diagnostic codes and disparities were observed for ethnicity, age and gender. Crude annual hospital-based incidence rates for males and females in Māori (689/100,000 and 302.8/100,000 person-years) and Pacific Island populations (582.6/100,000 and 217.6/100,000 person-years) exceeded those for the remaining population (435.4/100,000 and 200.9/100,000 person-years), particularly for males. The overall age-standardised hospital-based incidence rate for 2003/2004 was 342 per 100,000 per year, and 458 per 100,000 per year for Māori, with Māori males experiencing a peak in incidence between 30 and 34 years of age that was not apparent for the wider population.

Comment: Another issue close to my research heart, TBI is considered a 'silent epidemic' in NZ because it is under-reported, not well diagnosed and poorly managed. I suggest this is even more so for Māori. The complications for TBI are wide reaching and include learning problems (particularly important for children), mental health issues including drug/alcohol dependence and major impacts on whānau ora/wellbeing as it is often whānau trying to manage with little/no support. ACC and hospital figures show that despite the higher incidence for TBI amongst Māori, they are less likely to receive rehabilitation. And so we must 'attack' this problem at different fronts:

1. ensure accurate diagnosis of TBI in Māori
2. investigate reasons for increased TBI rates in Māori and particularly males aged 30–34 years
3. reduce TBI in Māori with targeted injury prevention
4. ensure Māori with TBI receive quality care including support/education for whānau.

Reference: *Neuroepidemiology*. 2009;32(1):32-9.

<http://content.karger.com/ProdukteDB/produkte.asp?doi=10.1159/000170090>

Patterns of presentation to the Australian and New Zealand Paediatric Emergency Research Network

Authors: Acworth J et al

Summary: This study analysed epidemiological data from 351,440 paediatric emergency department (ED) visits to an Australian and New Zealand research network (i.e. 11 sites of the Paediatric Research in Emergency Departments International Collaborative [PREDICT]) in 2004. Mean patient age was 4.6 years and 55% were boys. Presentations were identified as 3% Aboriginal at Australian sites and 44% Māori/Pacific in New Zealand locations. According to the Australasian Triage Scale (ATS), 5% were ATS 1 or 2 (to be seen immediately or within 10 min), 27% ATS 3 (to be seen within 30 min) and 67% ATS 4 or 5. Although ED visits peaked in late winter and early spring, admission rates remained unchanged throughout the year with an overall admission rate of 24%. Most frequent diagnoses were acute gastroenteritis, acute viral illness and upper respiratory tract infection. Asthma was the next most common.

Comment: Importantly, this study shows ethnic differences in the number of presentations to paediatric EDs in participating NZ sites. Further analysis will be undertaken to determine whether these were 'avoidable' (could have been managed in primary care and therefore raise questions about access to GPs) or necessary (and so planning to improve access for Māori children to EDs would be required).

Reference: *Emerg Med Australas*. 2009;21(1):59-66.

<http://www3.interscience.wiley.com/journal/122208077/abstract>

Separate and unequal: clinics where minority and nonminority patients receive primary care

Authors: Varkey AB et al

Summary: Data were examined from surveys of 96 primary care clinic managers, 388 primary care physicians, and 1701 of their adult patients with hypertension, diabetes mellitus, or congestive heart failure. Clinics were based in New York and in the upper Midwest; data from 27 clinics with ≥30% minority patients were contrasted with data from 69 clinics with <30% minority patients. Compared with clinics serving <30% minority patients, clinics serving ≥30% minority patients have less access to medical supplies (2.7 vs 3.4), referral specialists (3.0 vs 3.5) on a scale of 1 (none) to 4 (great), and examination rooms per physician (2.2 vs 2.7). Their patients are more frequently depressed (22.8% vs 12.1%), are more often covered by Medicaid (30.2% vs 11.4%), and report lower health literacy (3.7 vs 4.4) on a scale of 1 (low) to 5 (high). Physicians from clinics serving higher proportions of minority populations perceive their patients as frequently speaking little or no English (27.1% vs 3.4%), having more chronic pain (24.1% vs 12.9%) and substance abuse problems (15.1% vs 10.1%), and being more medically complex (53.1% vs 39.9%) and psychosocially complex (44.9% vs 28.2%). Regression analyses revealed that clinics with ≥30% minority patients are more likely to have chaotic work environments and to have fewer physicians reporting high work control or high job satisfaction.

Comment: I have to admit that I occasionally screwed my nose when reading parts of this paper, especially the bits about clinicians' perceptions of their patients. But then again, there are some aspects here that we should be open about and reflect on given the major workforce recruitment and retention issues for clinics serving communities with 'high needs'. Certainly the ways in which healthcare is provided must take into account the increased complexity, inadequate resources and reduced access to secondary services for clinicians. Other ways to improve the working environment for clinicians may include clinical governance and a sound and effective infrastructure. Similar research is required here in NZ but the findings from this study could be useful for Māori-led primary care clinics.

Reference: *Arch Intern Med*. 2009;169(3):243-50.

<http://archinte.ama-assn.org/cgi/content/abstract/169/3/243>

Geographical access to termination of pregnancy services in New Zealand

Authors: Silva M et al

Summary: This study sought to determine geographic accessibility to first trimester termination of pregnancy (TOP) services. The analyses revealed that such services are relatively difficult to access for women who live in regions that do not offer local TOP services; these women must travel on average 221km to access TOP services, equating to an average return-trip distance of 442km. The data also have implications for equity in access to services, with three of the five regions that do not have local TOP services available having a higher than average proportion of Māori population.

Comment: Some may believe that access to first trimester TOP is not an important health issue. However, the fact is that these services are not distributed equally across NZ and access is more difficult for Māori. As I understand, the barrier is not just distance to travel but also significant cost as women who live in regions that do not offer local TOP services may have to pay for these services when seen in another region. This is unfair and contributes further to inequities in access.

Reference: *Aust N Z J Public Health*. 2008;32(6):519-21.

<http://www3.interscience.wiley.com/journal/121559919/abstract>

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